

Application Serial No. 10/631,877
Reply to Office Action of December 6, 2006

PATENT
Docket: CU-3620

Amendments to the Claims

The listing of claims presented below replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1. (withdrawn) Procedure for the production of one in at least two subsequent castings molded object in a mold consisting of at least three mold parts, characterized by the fact that at least one middle part (3), placed between the preferably stationary front part (1) and the movable back part (2), after molding of the first part of the object (5) are turned at least one time preferably 180 degrees around an axis/axle (4), which preferably is at a right angle to the movement direction between the front part (1) of the mold and the back part (2), before the molding of the following part of the object (10).
2. (withdrawn) Procedure for the production of one in at least two subsequent castings molded object as mentioned in claim 1, characterized by the fact that the material in the at least two molded parts of the object (5) and (10) either can be the same, e.g. the same thermoplastic material, or different materials such as two different thermoplastic materials, a thermoplastic material and an elastomer or a thermoplastic material and one for the sinter process decided material.
3. (withdrawn) Procedure for the production of one in at least two subsequent castings molded object as mentioned in one or more of the previous claims, characterized by the fact that at least one of the turnable middle parts (3) is thermal insulated, e.g. with an insulating plate (11) between the two surfaces of the middle part (3), so that e.g. in the area of the mold on one side of the middle part (3) by the

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front part (1) a clearly higher temperature can be maintained than in the area at the back part (2). (This method can also be realized with a normal index mold/turn mold, where the one side of the turnable part is insulated in respect to the other side, as well as a combination of the two designs is possible).

4. (withdrawn) Procedure as mentioned in claim 3, characterized by the fact that the with the insulating plate (11) equipped turnable middle part (3) are turned 180 degrees before the object/objects are removed from the first part of the mold to the second part of the mold, hereafter the middle part (3) is turned back again, whereby the objects e.g. can be transferred from a warm to a colder mold part without these two mold parts being in considerable contact with each other, while the object/objects are transferred to the new temperature area. Hereafter the middle part is turned 180 degrees again and the molding continues. Using this procedure two considerable different materials e.g. can be molded together, such as a thermoplastic material and an elastomer, silicone etc.. (This method can also be realized by a normal index mold/turn mold).

5-10. (cancelled)

11. (currently amended) A mold comprising:

a front part having a front profile;

a back part having a back profile; and

a plurality of middle parts, each middle part having a middle profile;

wherein at least one of the front ~~[[part]]~~ and ~~[[the]]~~ back ~~part-move parts~~
moves relative to one another between an open position and a closed position,

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wherein the plurality of middle parts ~~[[part]]~~ is disposed between the front and back parts in the closed position,

wherein each ~~[[the]]~~ middle part ~~[[being]]~~ is turnable about a separate axis,

wherein the front part and the middle parts are alignable together to form a plurality of first perimeters defining a corresponding plurality of first cavities ~~perimeter of a first cavity~~ substantially bounded by the front profile and the middle profiles when the front part and the middle parts are aligned paired together in the closed position whereby a plurality of sub-unit molded products can be formed in the plurality of first cavities by filling the first cavities with a substrate in which each sub-unit molded product comprising a first shape having a front complementary profile and a middle complementary profile ~~can be formed by filling the first cavity with a substrate,~~

wherein the front part and the middle parts ~~[[part]]~~ are separable from each other, and

wherein the back part and the middle parts are alignable together when the plurality of sub-unit molded products are still ~~product is~~ attached to the middle parts ~~[[part]]~~ to form a plurality of second perimeters defining a corresponding plurality of second cavities ~~perimeter of a second cavity~~ substantially bounded by the ~~middle complementary profile~~ a plurality of front complementary profiles in each of the sub-unit molded products when still attached to the middle parts and bounded by the back profile when the middle parts and the back part are aligned paired together in the closed position whereby, a plurality of assembled objects can be formed by filling the second cavities with a substance that mates with the sub-unit molded products, in which each ~~[[an]]~~ assembled object comprising a second shape having the front complementary profile

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and a back complementary profile ~~can be formed by filling the second cavity with a substance that merges with the sub-unit molded product.~~

12. (currently amended) The mold according to Claim 11 wherein ~~[[said]]~~ each middle part rotates approximately 180 degrees between molding cycles.

13. (currently amended) The mold according to Claim 11 wherein the rotation axis of ~~[[the]]~~ each middle part is perpendicular to the relative movement direction between the front and back parts.

14. (currently amended) The mold according to Claim 11 wherein ~~[[the]]~~ each middle part having several back profiles.

15. (currently amended) The mold according to Claim 11 wherein ~~[[the]]~~ each middle part having an insulating plate wherein ~~[[the]]~~ each middle part is thermally insulated.

16. (currently amended) The mold according to Claim 11 wherein the front part has having several front profiles.

17. (currently amended) The mold according to Claim 11 wherein the back part has having several back profiles.

18. (currently amended) The mold according to Claim 11 further comprising an ejector in ~~[[the]]~~ each middle part.

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19. **(currently amended)** The mold according to Claim 18 wherein the ejector includes having a ball screw mechanism.
20. **(currently amended)** The mold according to Claim 11 further comprising at least one hold-down to retain ~~[[the]]~~ each sub-unit molded product to ~~[[the]]~~ each middle part during a molding cycle.
21. **(previously presented)** The mold according to Claim 11 wherein the substrate is selected from the group consisting of a thermoplastic material, an elastomer, a silicon plastic, and a metal.
22. **(previously presented)** The mold according to Claim 11 wherein the substance is selected from the group consisting of a thermoplastic material, an elastomer, a silicon plastic, and a metal.
23. **(previously presented)** The mold according to Claim 11 wherein the substrate comprises a metal and the substance comprises a plastic material.
- 24-29. **(canceled)**